

CUMULATIVE TABLE OF CONTENTS, VOLUME 26

Number 1

SELECTED TOPICS IN HEMOSTASIS AND THROMBOSIS
Nobuo Sakuragawa, M.D., Ph.D., Guest Editor**Preface**, Eberhard F. Mammen, M.D.**Molecular and Genetic Mechanisms of Factor XIII A Subunit Deficiency**, Akitada Ichinose, M.D., Ph.D., Masayoshi Souri, Ph.D., Tomonori Izumi, Ph.D., and Nobumasa Takahashi, M.D., Ph.D.**Studies on Congenital Protein C Deficiency in Japanese: Prevalence, Genetic Analysis, and Relevance to the Onset of Arterial Occlusive Diseases**, Toshiyuki Sakata, Ph.D., Kazuomi Kario, M.D., Yoshiaki Katayama, Ph.D., Tatsuo Matsuyama, M.D., Hisao Kato, Ph.D., and Toshiyuki Miyata, Ph.D.**Diagnosis of Disseminated Intravascular Coagulation by Hemostatic Molecular Markers**, Hideo Wada, M.D., Ph.D., Esteban Gabozza, M.D., Ph.D., Takahiro Nakasaki, M.D., Minoru Shimura, M.D., Ph.D., Kazuyo Hiyoyama, M.D., Ph.D., Katsumi Deguchi, M.D., Ph.D., Masuakatsu Nishikawa, M.D., Ph.D., Nobuo Sakuragawa, M.D., Ph.D., and Hiroshi Shiku, M.D., Ph.D.**Study of Cardiovascular Risk Factors and Hemostatic Molecular Markers in Elderly Persons**, Katsumi Deguchi, M.D., Ph.D., Akira Deguchi, M.D., Ph.D., Hideo Wada, M.D., Ph.D., and Seiko Murashima, M.D., Ph.D.**Current Status of Hemophilia Patients and Recombinant Coagulation Factor Concentrates in Japan**, Katsuyuki Fukutake, M.D., Ph.D.**Antithrombotic Regulation in Human Endothelial Cells by Fibrinolytic Factors**, Hideharu Fukao, Ph.D. and Osamu Matsuo, M.D., Ph.D.**Coagulation-Associated Enhancement of Fibrinolytic Activity via the Neutralization of PAI-1 Activity**, Tetsumei Urano, M.D., Ph.D., Hayato Ihara, Ph.D., Yuko Suzuki, M.D., Yumiko Takada, M.D., Ph.D., and Akikazu Takada, M.D., Ph.D.**Pathogenesis of a Bleeding Disorder Characterized by Platelet Unresponsiveness to Thromboxane A₂**, Ichiro Fuse, M.D., Wataru Higuchi, M.D., and Yoshifusa Aizawa, M.D.**Platelet Activation Mediated through Membrane Glycoproteins: Involvement of Tyrosine Kinases**, Yukio Ozaki, M.D., Ruomei Qi, M.D., Kaneo Satoh, M.D., Naoki Asazuma, M.D., and Yutaka Yatomi, M.D.**Molecular Pathogenesis of Bernard-Soulier Syndrome**, Tomohiro Hayashi, M.D., Ph.D. and Keijiro Suzuki, M.D., Ph.D.**Angiogenesis and Its Regulation: Roles of Vascular Endothelial Cell Growth Factor**, Kazunori Nakagawa, Ph.D., Yong-Xiang Chen, M.D., Hiroaki Ishibashi, M.D., Ph.D., Yoshikazu Yonemitsu, M.D., Ph.D., Toshinori Murata, M.D., Ph.D., Yasuyuki Hata, M.D., Ph.D., Yutaka Nakashima, M.D., Ph.D., and Katsuo Sueishi, M.D., Ph.D.**Molecular Biology of Ryudocan, and Endothelial Heparan Sulfate Proteoglycan**, Tetsuhito Kojima, M.D.**Cis-Elements Required for Expression of Human Protein C Inhibitor (PCI) Gene in HepG2 Cells and Its Androgen-Dependent Expression in the Rat Reproductive Organs**, Koji Suzuki, M.D., Ph.D. and Tatsuya Hayashi, M.D., Ph.D.**Effects of β 2-Glycoprotein I and Monoclonal Anticardiolipin Antibodies on Extrinsic Fibrinolysis**, Masahiro Ieko, M.D., Ph.D., Kenji Ichikawa, M.D., Ph.D., Tatsuya Atsumi, M.D., Ph.D., Rie Tsuchi, M.D., Ken-ichi Sawada, M.D., Ph.D., Taro Yasukouchi, M.D., Ph.D., and Takao Koike, M.D., Ph.D.**Analysis of Intron 13 Microsatellite Repeat Polymorphism of the Factor VIII Gene by Capillary Electrophoresis**, Chinuyo Sumita, Pharm.D., Akira Suehiro, M.D., Ph.D., Akihiro Sawada, M.D., Satoshi Higasa, M.D., Ph.D., Motoo Ueda, M.D., and Eizo Kakishita, M.D., Ph.D.**Whole Blood Prothrombin Time Using Diluted Tissue Factor is Shortened in Spontaneous Hypertensive Rats**, Machiko Munakata, B.S., Yutaka Komiyama, Ph.D., Midori Masuda, Ph.D., Hideo Kagawa, M.D., Shosaku Nomura, M.D., Shirou Fukuhara, M.D., and Hakuo Takahashi, M.D.**Fibrin D-Dimer in Thrombotic Disorders**, Takefumi Matsuo, M.D., Hiroko Kobayashi, B.Pharm., Kazuomi Kario, M.D., and Shunji Suzuki, M.D.**ISI/INR System in Japan: Experience from Simultaneous Measurement of the Same Plasma at Four Different Laboratories**, Yoshio Uetsuka, M.D., Nobuo Sakuragawa, M.D., Ph.D., Hideo Wada, M.D., Ph.D., Yoshifusa Aizawa, M.D., and Masahiko Aosaki, M.D.**Increased Hemostatic Molecular Markers in Patients Undergoing Anticoagulant Therapy**, Hideo Wada, M.D., Ph.D., Hiroshi Ikuma, Yoshitaka Mori, M.D., Ph.D., Minoru Shimura, M.D., Kazuyo Hiyoyama, M.D., Takahiro Nakasaki, M.D., Kouzi Onada, M.D., Ph.D., Norkazu Yamada, M.D., Toyohiko Ohta, Hiroshi Shiku, M.D., Ph.D.**Differences in Reactivity to Vitamin K Administration of the Vitamin K-Dependent Procoagulation Factor S, Protein C and S, and Osteocalcin**, Yoshitsugu Shirakawa, M.D., Akira Shirahata, M.D., and Miwako Fukuda, M.D.

Number 2

COAGULATION INHIBITORS

Joseph Kaplan, M.D., and Elisabeth Secord, M.D., Guest Editors

Preface, Joseph Kaplan, M.D. and Elisabeth Secord, M.D.**Properties of Anti-Factor VIII Inhibitor Antibodies in Hemophilia A Patients**, Dorothea H. Scandella, Ph.D.**Phage Display Technology: A Tool to Explore the Diversity of Inhibitors to Blood Coagulation Factor VIII**, Jan Voorberg, Ph.D. and Edward N. van den Brink, M.Sc.**Natural Autoantibodies and Anti-Idiotypes**, Jean Guy G. Gilles, Ph.D., Beatrijs van Zielegheem, M.Sc., and Jean-Marie R. Saint-Remy, M.D., Ph.D.**Natural Antibodies to Factor VIII**, Sébastien Lacroix-Desmazes, Ph.D., Alexandre Moreau, Anastas Pashov, M.D., Ph.D., Sooryanarayana, Ph.D., Jean-Marie Saint-Remy, M.D., Ph.D., Srinivas V. Kaveri, D.V.M., Ph.D., and Michel D. Kazatchkine, M.D., Ph.D.**Correlation between Factor VIII Genotype and Inhibitor Development in Hemophilia A**, Steven S. Fakhrazadeh, M.D., Ph.D. and Haig H. Kazazian, Jr., M.D.**Potential for Prevention of Inhibitor Formation by Immune Tolerance**, Joseph Kaplan, M.D., Carol Genyey, M.S., and Elisabeth Secord, M.D.**Inhibitor Antibodies to Factor VIII and Factor IX: Management**, Jeanne M. Lusher, M.D.**Immune Tolerance Induction: Is it Cost Effective? We Know Too Little**, Louis M. Aledort, M.D.**Laboratory Diagnosis of Inhibitors**, Mervyn A. Sahud, M.D.**Anaphylaxis in Patients with Hemophilia**, Modhavi Jadhav, M.D. and Indira Warrier, M.D.

Number 3

HYPERHOMOCYSTEINEMIA

Godfried H.J. Boers, M.D., and Jan J. Michiels, M.D., Ph.D., Guest Editors

Preface, Eberhard F. Mammen, M.D.**Pathways and Regulation of Homocysteine Metabolism in Mammals**, James D. Finkelstein, M.D.

Consequence of Homocysteine Export and Oxidation in the Vascular System, Henk J. Blom, M.D.

Assay Methods for the Measurement of Total Homocyst(e)ine in Plasma, Johan B. Ubbink, D.Sc.

Homocysteine, Coagulation, Platelet Function and Thrombosis, Giovanni DiMinno, M.D., Antonio Coppola, M.D., Valentino De Stefano, M.D., Francesco P. Mancini, M.D. and Anna Maria Cerbone, M.D.

Genetic Modulation of Homocysteinemia, Rima Rozen, Ph.D.

Biological and Environmental Determinants of Plasma Homocysteine, Jørn Schneede, M.D., Helga Refsum, M.D. and Per Magne Ueland, M.D.

Hyperhomocysteinemia, Vascular Pathology and Endothelial Dysfunction, Coen van Guldener, M.D. and Coen D.A. Stehouwer, M.D.

Mild Hyperhomocysteinemia is an Independent Risk Factor of Arterial Vascular Disease, Godfried H.J. Boers, M.D.

Homocysteine and Venous Thrombosis: Outline of a Vitamin Intervention Trial, Huub P.J. Willems, M.D., Martin den Heijer, M.D., Ph.D. and Gerard M.J. Bos, M.D., Ph.D.

Interaction Between Hyperhomocysteinemia and Inherited Thrombophilic Factors in Venous Thromboembolism, Valerio De Stefano, M.D., Ida Casorelli, M.D., Elena Rossi, M.D., Bruno Zappacosta, M.D. and Giuseppe Leone, M.D.

Homocysteine and Renal Disease, Coen van Guldener, M.D. and Kilian Robinson, M.D.

Hyperhomocysteinemia and Risk of Vascular Disease in Women, Petra Verhoef, M.D.

Vascular Complications of Severe Hyperhomocysteinemia in Patients with Homocystinuria Due to Cystathionine- β -Synthase Deficiency: Effects of Homocystine-Lowering Therapy, Sufin Yap, M.D., Eileen R. Naughten, M.D., Bridget Wilcken, M.D., David E.L. Wilcken, M.D. and Godfried H.J. Boers, M.D., Ph.D.

Vitamin Supplements and Cardiovascular Risk: Review of the Randomized Trials of Homocystine-Lowering Vitamin Supplements, Robert Clarke, M.D. and Jane Armitage, M.R.C.P.

Fortifying Food with Folic Acid, Malcolm Law, M.D.

Number 4

RECOMBINANT ACTIVATED FACTOR VII (rFVIIa): FROM CONCEPT TO CLINICAL UTILITY

Jan J. Michiels, M.D., Ph.D., Guest Editor

Preface, Eberhard F. Mammen, M.D. and Jan J. Michiels, M.D., Ph.D.

Recombinant Coagulation Factor VIIa: From the Concept to Clinical Application in Hemophilia Treatment in 2000, Ulla Hedner, M.D.

The Regulation of the Factor VII-Dependent Coagulation Pathway: Rationale for the Effectiveness of Recombinant Factor VIIa in Refractory Bleeding Disorders, Cornelius van't Veer, Ph.D. and Kenneth G. Mann, Ph.D.

The Factor VII-Platelet Interplay: Effectiveness of Recombinant Factor VIIa in the Treatment of Bleeding in Severe Thrombocytopathia, Dougald M. Monroe, M.D., Maureen Hoffman, M.D., Geoffrey A. Allen, M.D. and Harold R. Roberts, M.D.

Tissue Factor on the Loose, Peter L.A. Giesen, M.D., Ph.D. and Yale Nemerson, Ph.D.

Pharmacokinetics of Recombinant Activated Factor VII (rFVIIa), Elisabeth Erhardtson, D.V.M.

Molecular Biology and Clinical Manifestations of Hereditary Factor VII Deficiency, Falko H. Herrmann, Ph.D., Karin Wulff, Ph.D., Karin Auberger, M.D., Volker Aumann, M.D., Franke Bergmann, M.D., Karsten Bergmann, M.D., Elfriede Bratanoff, M.D., Dirk Franke, M.D., Marc Grundeis, M.D., Wolfhart Krenz, M.D., Harald Lenk, M.D., Hajna Losonczy, M.D., Bernhard Maak, M.D., Guy Marx, M.D., Christine Mautz-Körholz, M.D., Hartmut Pollmann, M.D., Margit Serban, M.D., Anton Sutor, M.D., Guenter Syrbe, M.D., Guenter Vogel, M.D., Nicodemo Weinstock, M.D., Ernst Wenzel, M.D. and Kerstin Wolf, M.D.

Recombinant Factor VIIa for the Treatment of Congenital Factor VII Deficiency, Mathilde Hunault, M.D. and Kenneth A. Bauer, M.D.

The Treatment of Bleeding in Hemophilia Patients with Inhibitors with Recombinant Factor VIIa, Claude Negrier, M.D. and Charles R.M. Hay, M.D.

Recombinant Factor VIIa in the Treatment of Bleeding in Hemophilic Children with Inhibitors, Amy D. Shapiro, M.D.

Continuous Infusion of Recombinant Factor VIIa in Hemophilic Patients with Inhibitors: Safety, Monitoring and Cost Effectiveness, Sam Schulman, M.D.

Efficacy and Safety of Recombinant Factor VIIa in the Prophylaxis of Bleeding in Various Surgical Procedures in Hemophilic Patients with Factor VIII and Factor IX Inhibitors, Jørgen Ingerslev, M.D.

Recombinant FVIIa in the Treatment of Warfarin Bleeding, Erik Berntorp, M.D.

Effectiveness of the Recombinant Factor VIIa in Patients with the Coagulopathy of Advanced Child's B and C Cirrhosis, David Bernstein, M.D.

Letter to the Editor

Number 5

ENDOTHELIAL DYSFUNCTION

Peter Nawroth, M.D., Guest Editor

Preface, Eberhard F. Mammen, M.D.

Hemostatic Protease Receptors and Endothelial Cell Function: Insights from Gene Targeting in Mice, Klaus T. Preissner, Ph.D.

The Endothelium and Thrombosis, Peter L. Gross, M.D. and William C. Aird, M.D.

A Pathway Leading to Hypoxia-Induced Vascular Fibrin Deposition, Shi-Fang Yan, M.D., David J. Pinsky, M.D., and David M. Stern, Ph.D.

RAGE: A Multiligand Receptor Contributing to the Cellular Response in Diabetic Vasculopathy and Inflammation, Ann-Marie Schmidt, M.D., Marion Hofmann, M.D., Akihiko Taguchi, M.D., Shi Du Yan, M.D., and David M. Stern, Ph.D.

Impaired Endogenous Fibrinolysis in Diabetes Mellitus: Mechanisms and Therapeutic Approaches, Thomas K. Nordt, M.D. and Christoph Bode, M.D.

Endothelial Dysfunction in Diabetes Mellitus, Stephan Schiekofer, M.D., Bernd Balletshofer, M.D., Martin Andrassy, M.D., Angelika Bierhaus, M.D., and Peter P. Nawroth, M.D.

Lipoproteins and the Endothelium: Insights from Clinical Research, Klaus A. Dugi, M.D. and Daniel J. Rader, M.D.

The Endothelium and Lipoproteins: Insights From Recent Cell Biology and Animal Studies, Daniel J. Rader, M.D. and Klaus A. Dugi, M.D.

Endothelial Dysfunction in Hypercholesterolemia: Mechanisms, Pathophysiological Importance and Therapeutic Interventions, Ulf Landmesser, M.D., Burkhard Hornig, M.D., and Helmut Drexler, M.D.

Asymmetric Dimethylarginine, Derangements of the Endothelial Nitric Oxide Synthase Pathway, and Cardiovascular Diseases, Rainer H. Böger, M.D. and Stefanie M. Bode-Böger, M.D.

Endothelial Dysfunction: Impact on Epicardial Coronary Arteries and Microcirculation, Christian J.F. Holubarsch, M.D.

Functions of the VEGF/VEGF Receptor System in the Vasculature, Georg Breier, M.D.

Molecular Biology of the VEGF- and the VEGF-Receptor Family, Matthias Clauss, Ph.D.

LPS and Cytokine Activated Endothelium, Angelika Bierhaus, Ph.D., Jiang Chen, M.D., Birgit Liliensiek, Ph.D., and Peter P. Nawroth, M.D.

The Hepatic Microvascular Response to Sepsis, Axel Ring, M.D. and Wolfgang Stremmel, M.D.

Number 6

**STRATEGIES IN THE DIAGNOSIS OF DEEP VEIN
THROMBOSIS AND PULMONARY EMBOLISM - PART 1**
Jan J. Michiels, M.D., Ph.D., Guest Editor

Preface, Eberhard F. Mammen, M.D. and Jan J. Michiels, M.D., Ph.D.

Fibrin Clot Formation and Lysis: Basic Mechanisms, Johannes H. Sidelmann, Ph.D., Jørgen Gram, M.D., D.Sc., Jørgen Jespersen, M.D., D.Sc., and Cornelis Kluft, D.Sc.

D-Dimer Assays for the Exclusion of Venous Thromboembolism, Guido Reber, M.D. and Philippe de Moerloose, M.D.

Performance of Semi-Quantitative and Quantitative D-Dimer Assays in the ECAT External Quality Assessment Program, Moniek P.M. de Maat, M.D., Piet Meijer, M.Sc., Willem Nieuwenhuizen, Ph.D., Frits Haverkate, Ph.D., and Cornelis Kluft, D.Sc.

Use of D-Dimer Assays in the Diagnosis of Venous Thrombosis, Carl-Erik Dempfle, M.D.

Assessment of Deep Vein Thrombosis or Pulmonary Embolism by the Combined Use of Clinical Model and NonInvasive Diagnostic Tests, Philip S. Wells, M.D., David R. Anderson, M.D., and Jeffrey Ginsberg, M.D.

Strategies for the Safe and Effective Exclusion and Diagnosis of Deep Vein Thrombosis by the Sequential Use of Clinical Score, D-Dimer Testing and Compression Ultrasonography, Jan Jacques Michiels, M.D., Ph.D., Geneviève Freyburger, Ph.D., Fedde van der Graaf, Ph.D., Mirian Janssen, Ph.D., Wija Oortwijn, Ph.D., and Edwin JR van Beek, M.D., Ph.D.

Supplement 1

**HEPARINS IN THE NEW MILLENNIUM: WILL
UNFRACTIONATED HEPARIN SURVIVE?**
Jawed Fareed, Ph.D., Victor J. Marder M.D.,
and Debra A. Hoppensteadt, Ph.D., D.I.C., Guest Editors

Preface, Eberhard F. Mammen, M.D.

Introduction, Kenneth D. McClatchey, D.D.S., M.D.

An Update on Heparins at the Beginning of the New Millennium, Jawed Fareed, Ph.D., Debra Hoppensteadt, Ph.D., D.I.C., and Roger L. Bick, M.D., Ph.D.

Development of Tinzaparin: A Heparinase-Digested Low-Molecular-Weight Heparin, Ulla Hedner, M.D.

Comparative Pharmacokinetics of LMWHs, Meyer M. Samama, M.D. and Grigoris T. Gerotziakas, M.D., Ph.D.

Comparative Efficacy of Different Low-Molecular-Weight Heparins (LMWHs) and Drug Interactions with LMWH: Implications for Management of Vascular Disorders, Shaker A. Mousa, Ph.D., FACC, FACB

Prophylaxis and Treatment of Deep-Vein Thrombosis, Hans Klaus Breddin, M.D.

Comparative Efficacy of Low-Molecular-Weight Heparins in Orthopedic Surgery, Michael Rud Lassen, M.D.

An Equivalence Study of Two Low-Molecular-Weight Heparins in the Prevention and Treatment of Deep-Vein Thrombosis after Total Hip Replacement, André Planès, M.D.

Low-Molecular-Weight Heparin in the Treatment of Venous Thromboembolism, Russell D. Hull, M.B.B.S., M.Sc. and Graham F. Pineo, M.D.

Low-Molecular-Weight Heparin and Cancer, Leo R. Zacharski, M.D., Deborah L. Ornstein, M.D., and Alexander C. Mamourian, M.D.

Antithrombotics and Anticoagulants in Coronary Syndromes and Stroke, Alexander G.G. Turpie, M.D.

Conclusions, Victor J. Marder, M.D.

Epilogue, Jawed Fareed, Ph.D. and Debra A. Hoppensteadt, Ph.D., D.I.C.